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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,330	12/30/2003	Thomas J. Good	10455-1US	4637

7590 06/19/2006

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EXAMINER	
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ART UNIT	PAPER NUMBER
1723	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/088,330	GOOD ET AL.	
	Examiner	Art Unit	
	John Kim	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25 and 27-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25 and 27-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The request to correct the inventorship of this nonprovisional application under 37 CFR 1.48(a) is deficient because:

An oath or declaration by each actual inventor or inventors listing the entire inventive entity has not been submitted.

Oath filed 4/24/06 does not list the entire inventive entity including Thomas Good and Allan Redmond. Also, the oath identifies application number 10/088,330 being filed on 12/30/2006 instead of 12/30/03. Furthermore, oath does not claim priority to PCT/US96/11300.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 27, 29-33 and 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Pieper et al (US Pat. No. 5,391,298). Pieper et al teach a container having a top (20) with an inlet (28) and a bottom (22) having a centrally located outlet (36) and a substantially flat inner well and the container (20, 22) having a thin layer of microparticulate extraction media disk (40) having a diameter of 47 mm and a thickness of 0.5 mm which meets the claimed ratio of the diameter of the extraction media layer to the thickness of the extraction media layer being at least 10 and the extraction media disk (4) being sandwiched between two cylindrical porous sheets (42, 44) i.e. compression layers and a lower mesh flow distributor (38) belong the lower porous sheet (44) wherein a liquid sample is passed through the container to extract analyte from the liquid sample by the extraction media (see figures (see figures 2-3; col. 4, line 7 – col. 6, line 27; col. 7, line 51 – col. 8, line 24; col. 1, lines 10-28).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5, 9-11, 21, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehl (US Pat. No. 4,774,058) in view of Markell et al (US Pat. No. 5,279,742). Mehl teaches method of using a filter for separating fluid samples comprising a microcolumn (12), a thin extraction media of particles (42) made of silica which are retained by upper and lower compression layers (36, 38, or 44) made of glass fibers which inherently have a pore size less than the particle of the extraction media to retain particles (see figures 4-7; col. 2, lines 9-16; col. 3, lines 37-47; col. 4, line 61 – col. 5, line 55). Mehl also teaches that thickness of disc is 0.4 mm and the diameter of disc is 4 mm and such specification of disc meets the claimed ratio of the effective diameter of the extraction media layer to the thickness of the layer (see col. 3, lines 37-47; col. 4, lines 61-64). Claims 1-5, 9-11, 17 and 24-25 essentially differ from the method and apparatus of Mehl in reciting that the extraction media has a particle size of less than 20 microns. Markell et al teach an extraction media disk comprising particles having a size less than 20 microns (see col. 8, line 27 – col. 10, line 11). Incorporating particles having a size less than 20 microns in the extraction media of Mehl would have been obvious at the time the invention was made since such particles are known to be used for extraction process as taught in Markell et al.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-8, 11-13, 21-22 and 25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-7, 9-10, 12 and 14 of U.S. Patent No. 5,595,653. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 4-7, 9-10, 12 and 14 of U.S. Patent No. 5,595,653 fully suggest claims 1-8, 11-13, 21-22 and 25 of the instant application.

8. Claims 9-10, 14-20, 23-24 and 27-40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-7, 10, 12, 14- 15 and 17-19 of U.S. Patent No. 5,595,653 (Good et al) in view of Pieper et al (US Pat. No. 5,391,298). Good et al teach microcolumn for extraction of analytes from liquids as disclosed in claims 1, 4-7, 10, 12, 14- 15 and 17-19. Claims 9-10, 14-20, 23-24 and 27-40 of the instant application essentially differ from claims 1, 4-7, 10, 12, 14- 15 and 17-19 of U.S. Patent No. 5,595,653 in reciting that container or microcolumn having a substantially flat bottom wall or inner well with the exit substantially centrally located therein. Pieper et al teach a solid phase extraction column comprising a pressurizable container (22) having a substantially flat bottom wall or inner well with the exit (36) substantially centrally located therein (see figure 2; col. 4, line 61 – col. 5, line 13). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the container or microcolumn of Good et al to have a substantially flat bottom wall or inner well with the exit substantially centrally located therein to be used as a pressurizable container for solid phase extraction process.

9. Applicant is advised that should claim 17 be found allowable, claims 18 and 20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

10. The declaration under 37 CFR 1.132 filed 4/20/06 is insufficient to overcome the rejection of claims 1-5, 9-11, 21, and 24-25 based upon Mehl in view of Markell et al as set forth in the last Office action because: Declaration states that prior art extraction columns such

as those described in Mehl typically uses a separation media having a larger particulate diameter, e.g. in the 40 micron range. However, Mehl teaches that extraction media in fiber form has a thickness of 0.5 micron to 50 microns (see col. 3, lines 42-47). Therefore, the commercial success of a thin layer of microparticulate extraction media less than 20 microns for extracting a substance may not be attributable to improvements or modifications made by others. In re Vamco Machine & Tool, Inc., 752 F.2d 1564, 224 USPQ 617 (Fed. Cir. 1985). Also, it is to be noted that applicant discloses in the specification that suitable extraction media having particle size of less than 20 microns and more preferably, less than 10 microns are described in US Patent No. 4,650,714 and are available from J.T. Baker Chemical Company of Phillipsburg, New Jersey, and is sold under their catalog number 7049-01 (see specification: page 6, lines 4-15).

11. Applicant's arguments filed 4/20/06 have been fully considered but they are not persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, applicants argue that it would not be obvious to use particles having a size less than 20 microns in the extraction media. However, Mehl teaches that extraction media in fiber form has a thickness of 0.5 micron to 50 microns (see col. 3, lines 42-47). Employing known particle extraction media having particles of size less than 20 microns as described in

Markell et al in the microcolumn of Mehl would have been obvious to a person of ordinary skill in the art.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Kim
Primary Examiner
Art Unit 1723

JK
June 15, 2006